Application No.: 10/700195

Docket No.: 05587-00359-US

## AMENDMENTS TO THE CLAIMS

- 1. (cancelled)
- (currently amended) The copolymer process as claimed in claim 6, wherein x is a whole number from 500 to 10,000.
  - 3. (currently amended) The <u>process copolymer</u> as claimed in <u>claim 1 claim 6</u>, wherein said polyoxymethylene blocks also contain structural repeat units of the formula III

 $-(C_yH_{2y}-O_{-})_z$  (III),

besides the structural repeat units of the formula I, where y is a whole number from 2 to 4, and z is a whole number from 1 to 3.

- 4: (currently amended) The copolymer process as claimed in claim-1 claim 6, wherein R<sup>1</sup> is a -(C<sub>m</sub>H<sub>2m</sub>-O-)<sub>r</sub>-C<sub>m</sub>H<sub>2m</sub>- radical, m is a whole number from 2 to 4, and r is a whole number from 20 to 1,500.
- 5. (currently amended) The eepolymer process as claimed in claim 4, wherein m is 2.
- 6. (currently amended) A process for preparing a copolymer containing 70 to 99% by

  weight based on the copolymer of polyoxymethylene blocks of the structural repeat units

  of the formula I and from 1 to 30% by weight, blocks containing structural units of the

  formula II

[-O-CH<sub>2</sub>-]<sub>x</sub> (I), [-O-R<sup>1</sup>-] (II),

where R<sup>1</sup> is a divalent radical derived from a hydroxy-terminated aliphatic or cycloaliphatic oligomer or polymer which optionally has ether groups and/or carbonyloxy groups in the chain, and

x is a whole number, at least 10

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the copolymer as claimed in claim 1, encompassing the following measures:

(i) forming an initial charge from monomers which form -O-CH<sub>2</sub>- units together with monomers of the formula V

## $HO-R^1-OH$ (V),

where R<sup>1</sup> is as defined in claim 1 above, together with a catalyst usually used for polymerizing the monomers forming the -O-CH<sub>2</sub>- units, and optionally together with a solvent, and/or with regulators, and

- (ii) carrying out the copolymerization at a temperature of from 120 to 300°C and at a pressure of from 2 to 500 bar.
- 7. (Previously presented) The process as claimed in claim 6, wherein the resultant block copolymer is treated, after the preparation, with water and/or with a water-soluble alcohol at from 30 to 100°C.
- 8. (Cancelled)
- 9. (currently amended) The copolymer process as claimed in claim 1 claim 6, wherein x is a whole number from 1,500 to 5,000.
- 10. (currently amended) The copolymer process as claimed in claim 1 claim 6, wherein R¹ is a —(C<sub>m</sub>H<sub>2m</sub>-O-)<sub>r</sub>-C<sub>m</sub>H<sub>2m</sub>- radical, m is a whole number from 2 to 4, and r is a whole number from 50 to 1,000.
- 11. (Previously presented) The process as claimed in claim 6, wherein the resultant block copolymer is treated, after the preparation, with water and/or with a water-soluble alcohol at from 50 to 80°C.

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- 12. cancelled
- 13. (currently amended) The copolymer-process as claimed in claim 1 claim 6, wherein said blocks composed of homo- or copolyoxymethylenes in the copolymer of the formula I is from 80 to 95% by weight, and the proportion of structural repeat units of the formula II is from 5 to 20% by weight, based on the copolymer.
- 14. (currently amended)) The copolymer process as claimed in claim 1 claim 6, wherein said polyoxymethylene blocks are prepared by reacting trioxane with a cyclic ether and with a third monomer of the formula

$$R^2$$
-- $CH_2$ - $Z$ - $CH_2$ -- $R^2$ -,

where  $R^2$  and  $R^2$ , independently of one another, are radicals of the formula IVa, IVb, or IVc

wherein Z is a chemical bond, -O-, or -O- $R^3$ -O-and  $R^3$  is  $C_2$ - $C_8$ -alkylene or  $C_2$ - $C_8$ -cycloalkylene.

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15. (currently amended) The eopelymer-process as claimed in claim 6, wherein the copolymer which further contains from 0.1 to 20 mol %, based on the copolymer block, of co-components which are derived from ethylene oxide, propylene 1,2-oxide, butylene 1,2-oxide, butylene 1,3-oxide, 1,3-dioxane, 1,3-dioxolane, and 1,3-dioxepan.

- 16. (currently amended) The copolymer-process as claimed in claim 1 claim 6, wherein the copolymer which further contains from 0.5 to 10 mol %, based on the copolymer block, of co-components which are derived from ethylene oxide, propylene 1,2-oxide, butylene 1,2-oxide, butylene 1,3-oxide, 1,3-dioxane, 1,3-dioxalane, and 1,3-dioxepan.
- 17. (currently amended) The <del>copolymer process</del> as claimed in <del>claim 1 claim 6</del>, wherein the <u>copolymer contains</u> formula I is present in an amount from at least 80% by weight.
- 18. (currently amended) The eopolymer process as claimed in claim 1 claim 6, wherein the copolymer contains formula I is present in an amount from at least 90% by weight.